## **ABSTRACT**

A system and method for controlling epilepsy and other neurological disorders by providing electrical stimulation to a patient's brain in response to detected neurological conditions. An implantable device includes a stimulation subsystem coupled to a stimulation electrode to provide responsive electrical brain stimulation in response to an event detected via an on-board processor's analysis of data received from a detection subsystem coupled to a detection electrode located in a different portion of the patient's brain.